



## **An Analysis of the Trend and Pattern of Tourism in India with Special Reference to Medical Tourism**

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### **Abstract**

The tourism industry in India has not received due attention both in macro policy formulation and research. The present study attempts to analyze the trend and pattern of domestic tourism based on the unit-level data of NSSO ab. Y adopting Bai-Perron test and trend analysis. Medical tourism, a vital tourism component in India, has shown comparatively higher growth over the years, but especially after 2006, a lower growth rate and the COVID-19 pandemic accentuated this trend. Wide disparity could be seen among the states and socio-economic groups in India. A higher share of health and medical tourists was visible among the vulnerable group. The marginalized groups like old age groups, tourists from rural areas, SC/ST groups, the lowest MPCE group, and disabled persons had a higher chance to report medical tourism compared to their counterparts. As against the findings of the previous studies, the present study confirms a comparatively higher participation of vulnerable groups.

**Keywords:** domestic tourism, medical tourism, inequality, trend and pattern.

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## 1. Introduction

Tourism is pivotal in developing the economy, such as job creation, cultural exchange, etc. The increase in tourism in recent years has led to an unplanned development in India's tourism industry. The tourism sector, an important foreign exchange earner, helped to earn US \$ 8.797 billion compared to US\$ 6.958 billion in 2020, having a positive growth of 26.4 per cent (Ministry of Tourism, 2022., p.5). The share of domestic tourists has been increasing over the years. It has increased from 97 percent in 1991 to 98 percent in 2018. It further increased to around 100 per cent in 2020 due to the worldwide pandemic limitations. With an increase of 11.05 per cent over the previous year, India had 677.63 million domestic tourist visits in 2021. Health and medical purposes were the major intentions of domestic tourism, followed by leisure and recreation.

Medical tourism is "the travel of patients from their home country to another for the primary purpose of seeking medical treatment" (Cohen, 2010, p.11). Medical tourism is also defined as "activities related to travel and hosting a foreign tourist who stays at least one night at the destination region to maintain, improve or restore health through medical intervention" (Ministry of Tourism, 2022b, p.2). Domestic medical tourism is considered to be "the practice of travelling from one city to another or one state to another within one's country for treatment" (Roy, 2021). It is also defined as "travelling from an individual's usual place of residence to another within the country for better medical treatment" (Baksi & Verma, 2013, p.29).

There is a dearth of empirical studies that concentrate on the trend and pattern of domestic tourism in India, especially domestic medical tourism. It is against this background that the present study attempts to analyze the trend and pattern of domestic tourism and to delineate the factors that determine domestic medical tourism. The present study is based on the unit-level data from the National Sample Survey Organization's "Key Indicators of Domestic Tourism in India: NSS 72<sup>nd</sup> Round (July 2014-June 2015)". The information from *India Tourism Statistics* has also been used. Various econometrics methods like the Log-lin model, logistic regression model, etc. have been used to satisfy the above-mentioned objectives.

## 2. The Genealogy of Discussions

Tourism plays an important role in deciding the GDP increase directly and indirectly. GDP and employment in the economy are increased through tourism and its overall impact is widespread through its various linkages with other sectors (Bhatt & Munjal, 2013). India has experienced an unplanned expansion in the tourist industry which was an unprecedented one and it has boosted certain sectors of the economy like employment, infrastructure, etc. (Joshi & Pant, 1990). As per the multiplier analysis, the tourism sector has both forward and backward linkage effects which benefit the other sectors of the economy, particularly the service sector (Bhatt & Munjal, 2013). However, as the expansion was not due to the planning strategies, negative effects were evident (Joshi & Pant, 1990). The major purpose of domestic tourism is health and medical-related trips followed by holidays and recreation (Sharma & Naraparaju, 2017). Several factors determine international tourism. Demand factors in the originating countries and supply factors in destination countries determine the international tourist flow (Gidebo, 2021).

As far as medical tourism is concerned, it has a long history to report. For medical services, people had to travel a long around the world and this is being continued (Thompson, 2011). Medical tourism has been growing as a global industry. Tourism is considered to be a national industry in more than a quarter of the countries in the world (Mamun & Andaleeb, 2013).

Asia has become an important destination for global medical tourism (Reddy & Qadeer, 2010). In recent years, the growing activities in health tourism have received much attention (Loh, 2014). Medical tourism seems to be an important business (Cohen, 2010). India holds 10<sup>th</sup> rank in the Global Medical Tourism Index in the middle of 2020 (Agnihotri, 2022). India has become a hub of medical tourism (Munjal-Shankar, 2014). Medical tourism has become a big business in India (Sengupta, 2011). In addition, health tourism has been an important topic in public policy forums (Loh, 2014). A major source of expenditure for the health trip was the medical and medicine bills (Sharma & Naraparaju, 2017).

The reasons for India becoming a hub for medical tourism were the improvement in clinical research, advancement in IT-enabled services, low cost of surgical and medical interventions, etc. (Bhat, 2015). India has a relative advantage in low-cost treatments as well as services offered (Reddy & Qadeer, 2010). The major reasons for considering India as a medical tourist destination are well-trained health professionals, English-speaking health practitioners, availability of a blend of allopathic and alternative systems of medicines, use of advanced diagnostic equipment, and comparatively lower cost (Hazarika, 2010). The majority have been resorting to the private sector for medical care and neo-liberal policies further increased its rapid expansion (Sengupta, 2011). India promotes 'hi-tech healing' to become a world health destination. India has established fame in cardiac treatment, joint replacement, and dentistry and has been trying to expand to other areas to attract foreign tourists. Ayurvedic and other non-allopathic treatments are also used to attract foreign tourists to India (de Arellano, 2007). The 'reproductive tourism', i.e., medical tourism which is mainly meant for reproductive technologies like invitro fertilization and surrogate parenthood, also helped to increase the flow of medical tourists into India (Sengupta, 2011).

If we look into the unfavourable effects of medical tourism, there exists an increasing inequality in access to medical tourism, and marginalized sections are not able to get it (Sengupta, 2011). Inefficient and inadequate public health services on the one hand, and high-end medical technology available in the corporatized medical system on the other hand accentuated the division between the have and have-nots in accessing the health care facilities (Godwin, 2004). The poor are being denied basic healthcare facilities while the elite groups are enjoying all these facilities and further, the neoliberal policies helped to increase the bridge between the haves and the have-nots. Moreover, the socioeconomic conditions of the people determine their access to health facilities. As far as access to medical facilities is concerned, women from different parts of the world are coming to India to utilize the health care facilities specially characterized by reproductive technologies, but contrary to this the majority of Indian women are not in such a position to utilize these facilities (Sengupta, 2011).

In recent years, medical tourism faced unprecedented issues especially due to Covid pandemic. The impact of the pandemic has been damaging for many countries in many sectors like the health tourism sector. An important segment of medical tourism was mainly for electives and operations (Oğuz et al., 2020). Due to antibiotic resistance and globalization, hospitals that were engaged in medical tourism having crises could turn into opportunities (So et al., 2010). Globalization positively and negatively affects the healthcare system. It provides opportunities in many sectors, including the health sector but at the same time, it creates some adverse effects on the people who provide health services (Faisal & Dhusia, 2022). Healthcare has become a global issue due to globalization and globalization has reshaped the level of power of large transnational companies, distributional disputes, and decision-making (Schrecker, 2020; Labont et al., 2011). In developing countries, healthcare is also affected by the policies of international organizations (Forster et al., 2020). The pandemic has had a dramatic and sudden effect on medical tourism (Oğuz et al., 2020). The funds allocated to healthcare have had to be reallocated to comparatively more urgent needs and medical tourism for the first six months of 2020 was rescheduled (Oğuz et al., 2020).

It is to be noted that tourism in India has not received due attention both in macro policy formulation and research and there remain some research gaps in tourism in India (Bhatt & Munjal, 2013). In this context, it is the need of the hour to have an in-depth analysis of the factors that determine domestic tourism.

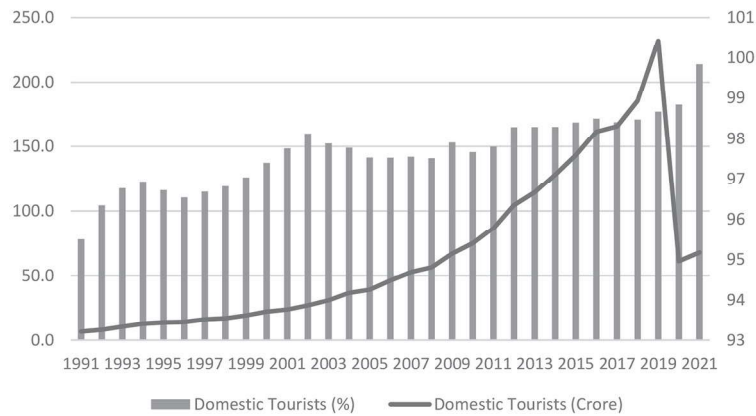
### **3. Trend and Pattern of Domestic Tourism**

To find out the trend and pattern of domestic tourism in India, data from various reports, especially from *India Tourism Statistics* and report of the 72<sup>nd</sup> Round of NSSO domestic tourism (July 2014 – June 2015) in India have extensively been used.

#### **3.1. The trend of domestic tourism**

Data on domestic tourists for the past 31 years show a vast improvement in the number of domestic tourists in India. It has improved from 6.7 crores in 1991 to 232.2 crores in 2019 but witnessed a sharp decline to 61 crores in 2020 due to the pandemic with a marginal improvement in 2021 with 67.8 crores of domestic tourists (Fig. 1).

**Figure 1**  
*The trend of domestic tourists (Crores) and its percentage to total tourists*



Source: India Tourism Statistics (Various years)

While analyzing the graph, different structural breaks in the growth of domestic tourists are evident (Fig. 1.). Structural break is “an unpredictable event in which the relationship among the variables in a model changes, and this change cannot be predicted in any sense from past data” (Maheu & Gordon 2008, p.554). To locate the exact structural break, the Bai-Perron test has been conducted by using Eviews software. As per the Bai-Perron test to find out multiple breakpoints, domestic tourists have different structural breaks over the period between 1991 and 2021. Domestic tourists had mainly three structural breaks in the years 1999, 2006, and 2012, among which, the year 2006 had higher structural breaks as per the Bai-Perron test (Table 1). On that basis, growth rates of domestic tourists for the different periods, i.e., before and after the structural break, have been calculated and presented in Table 2.

**Table 1**  
*Multiple breakpoint tests*

Bai-Perron tests of L+1 vs. L sequentially determined breaks
Sample: 1991 2021
Included observations: 31

Breaking variables: C			
Break test options: Trimming 0.15, Max. breaks 5, Sig. level 0.05			
Sequential F-statistic determined breaks:			3
		Scaled	Critical
Break Test	F-statistic	F-statistic	Value**
0 vs. 1 *	86.40257	86.40257	8.58
1 vs. 2 *	15.10865	15.10865	10.13
2 vs. 3 *	16.35414	16.35414	11.14
3 vs. 4	4.756699	4.756699	11.83
* Significant at the 0.05 level.			
** Bai-Perron (Econometric Journal, 2003) critical values.			
Break dates:			
	Sequential	Repartition	
1	2006	1999	
2	1999	2006	
3	2012	2012	

*Source: Computed from India Tourism Statistics (Various years)*

To analyze the picture of domestic tourists before and after the structural break, three regression models have been applied by using EViews software, and the results are given in Table 1 below. The pooled regression result for the period from 1991 to 2021 shows that India's domestic tourists had been increasing at the rate of 10.4 per cent and this rate is statistically significant. It is evident from the result that domestic tourists had been increasing at comparatively a lower rate of 6.2 per cent in the post-structural break period (2011-2021) with a statistically significant value compared to the pre-structural break (1991-2005), which had a growth rate of 11.6 per cent. The calculated compound growth rate (CGR) of domestic tourists also confirms this result having a CGR of 11.01 per cent in the pooled regression. The post-structural break period has a lower CGR (6.4 per cent) compared to the pre-structural break period (12.3 per cent) with a percentage difference decline of 48 points of percentage difference. The higher growth rate of domestic tourism in India during the pre-structural break period might be due to the growth of GDP in these years, especially between 1991 and 2010 (Akihito 2017). Further, one of the



reasons for the comparatively low growth rate in the post-breakdown period might be due to the global slowdown. It is reported that from January 2008 onwards, around 20 per cent of domestic tourists experienced a reduction in their income (Ministry of Tourism 2010, p.xxviii).

In 2021, it is observed that more than a fifth of domestic tourists was to Tamil Nadu (17.02 per cent) followed by Uttar Pradesh (16.19 per cent) (Ministry of Tourism, 2022, p.141), while most foreign tourists opted for Punjab (29.22 per cent) followed by Maharashtra (17.6 per cent) (Ministry of Tourism, 2022, p.142). Among the foreign tourists to India in 2021, a significant share (21.2 per cent) is for medical purposes (Ministry of Tourism, 2022, p.48).

**Table 2**

*Growth rates for domestic tourists (DOM\_TOURISTS<sub>t</sub>) for different periods (Method: Least Squares)*

Regression Results	Regression Equation: $\ln \text{DOM\_TOURISTS}_t = \beta_1 + \beta_2 \text{TIME} + u_t$
1991 - 2021 (31 years)	$\ln \text{DOM\_TOURISTS}_t = 18.193 + 0.104 \text{ TIME}$ SE = (0.123) (0.007) t = (147.523) (15.528) Prob. = (0.000) (0.000) r <sup>2</sup> = 0.892636 CGR = 11.012
1991 - 2005 (15 years)	$\ln \text{DOM\_TOURISTS}_t = 18.052 + 0.116 \text{ TIME}$ SE = (0.041) (0.004) t = (442.065) (25.853) Prob. = (0.000) (0.000) r <sup>2</sup> = 0.981 CGR = 12.312
2006 - 2021 (16 years)	$\ln \text{DOM\_TOURISTS}_t = 20.166 + 0.062 \text{ TIME}$ SE = (0.220) (0.023) t = (91.668) (2.725) Prob. = (0.000) (0.016) r <sup>2</sup> = 0.347 CGR = 6.397

Note: CGR - Compound growth rate

Source: *India Tourism Statistics* (Various years)



The time series analysis for the last 31 years shows that India's domestic tourists have been increasing at a rate of 10.4 per cent. But as far as the structural change analysis is concerned it had a structural break in the year 2006 and the pre-structural break period had a higher growth rate compared to the post-structural break period.

### **3.2. Pattern of Domestic Medical Tourism in India**

To find out the determinants of medical domestic tourism in India, unit-level data from the report of the latest round of NSSO domestic tourism (July 2014 - June 2015) in India have been used in this section.

A significant percentage of households have opted for domestic tourism. During the reference period, 5.6 crores of these tourists completed their trip during the last 365 days and 5.8 crores completed their trip during the last 30 days. For the sake of our analysis, our discussion concentrates on the respondents who have completed their trip during the last 365 days. The rate of households who went for domestic tourism completed during the last 30 days (21 per cent) is relatively more than the rate of people who completed their trip during the last 365 days (19 per cent) with a difference of 11.5 percentage points (NSSO 2016, p.8). The state-wise analysis shows that Kerala ranked first (32 per cent) among the 'Completed during 365 days' group, while it was Andhra Pradesh in the 'Completed during 30 days' group.

Medical tourism plays a very important role in contributing a major share of the national income. Among the domestic tourists, the purpose of the majority (65.1 per cent) was for health and medical.

**State-wise analysis:** As far as the total number of overnight visitors for domestic tourism is concerned the highest share was from Uttar Pradesh (16 per cent), followed by Maharashtra (9 per cent). But in the case of the share of the number of overnight visitors for domestic tourists, among the large states, Kerala ranked first having 30.2 per cent followed by Jammu and Kashmir (26.3 per cent). Among the small states/union territories, it was Puducherry (41 per cent) had the highest share followed by Lakshadweep (37 per cent) (Table 3).

Among the tourists, 40 per cent of the respondents' purpose for travel was health and medical. Among the tourists from the major Indian

states, the highest percentage share was from Tripura (56.6 per cent) followed by Bihar (56 per cent) and Assam (55.6 per cent). Among the small states/union territories, the highest percentage was from the A&N Islands (57 per cent). The average expenditure (in Rs.) per overnight trip for health and medical shows was Rs. 15336. The state-wise analysis shows that the highest average expenditure was reported in Punjab with Rs. 31512 and the least was in Meghalaya (Rs. 5802).

The pattern of tourists shows that the majority of the domestic tourists were going for health and medicine. Among the tourists, 40 per cent of the respondents' purpose was health and medical. Wide disparity exists among the states in India in total number of tourists and its percentage share. The average expenditure for a per night trip has increased to Rs. 13,654 with a 300 percent increase from 2008-09.

**Starting month:** The month-wise analysis shows that the highest participation in tourism started in August (10 per cent) and the least was in December (6.9 per cent).

**Mode of transport:** Most of the tourists use the bus as the mode of transport for medical tourism. The highest percentage of bus users was in rural areas (47 per cent) compared to urban areas (34 per cent). But in urban areas, a significant number of tourists (38 per cent) used transport equipment, and rental (hired transport).

**Table 3**

*State-wise Percentage of visitors to total number of persons, Percentage of purpose as health & medical and its Average expenditure (in Rs.) per overnight trip*

State/UT	Percentage of visitors to total number of persons	Percentage of purpose as health & medical	Average expenditure (in Rs.) per overnight trip for health & medical
Andhra Pradesh	24.0	45.6	17430
Arunachal Pradesh	21.4	37.5	10791
Assam	12.1	55.6	10817
Bihar	16.3	56.0	7009
Chhattisgarh	14.9	45.1	13587
Delhi	22.9	4.8	13267

State/UT	Percentage of visitors to total number of persons	Percentage of purpose as health & medical	Average expenditure (in Rs.) per overnight trip for health & medical
Goa	14.4	55.3	14055
Gujarat	18.6	27.9	15546
Haryana	20.9	40.2	21075
Himachal Pradesh	25.7	47.3	14679
Jammu & Kashmir	26.3	38.3	7061
Jharkhand	17.2	48.0	10694
Karnataka	22.1	42.8	15862
Kerala	30.2	45.8	16443
Madhya Pradesh	18.8	45.4	10532
Maharashtra	22.0	24.8	18071
Manipur	15.8	36.4	11287
Meghalaya	15.9	24.9	5802
Mizoram	15.3	40.5	15140
Nagaland	13.3	32.0	11999
Odisha	25.4	31.7	9244
Punjab	19.9	32.6	31512
Rajasthan	19.8	43.4	15058
Sikkim	17.5	32.7	13752
Tamil Nadu	21.6	42.7	17410
Telangana	20.9	46.5	17470
Tripura	19.8	56.6	8155
Uttar Pradesh	15.5	43.4	18196
Uttarakhand	20.7	32.1	13211
West Bengal	20.4	50.5	15908
A&N Islands	17.8	57.3	27328
Chandigarh	15.8	2.4	21072
Dadra&N. Haveli	17.9	51.8	6978
Daman & Diu	13.2	45.5	16045
Lakshadweep	37.4	41.7	30311
Puducherry	40.6	14.2	9036
All-India	19.6	40.1	15336

Source: Computed from (NSSO, 2016).

**The major type of stay:** Among the rural domestic medical tourists, the majority used 'other' methods for staying like hospitals, health clinics, nursing homes, carriages/coaches, ships, railway stations, tents, waiting rooms, etc. (80.9 per cent). Among urban tourists, this pattern is also visible but the share is comparatively lower (78.2 per cent).

**Expenditure:** The average expenditure per overnight trip was Rs. 15336, of which 80 per cent was meant for medical aspects followed by food and drink (6 per cent). UMPCE analysis across places of residence shows that in rural areas, the average expenditure per night has increased from Rs. 3416 in 2008-09 to Rs. 13654 in 2014-15 with a percentage difference of 300 percentage points. In urban areas, the average expenditure per night has increased from Rs. 6956 in 2008-09 to Rs. 21437 in 2014-15 with an increase of 208 percentage difference points. As UMPCE increases, the average expenditure per overnight increases, i.e., while the average expenditure per overnight in the lowest UPMCE was Rs. 13402, it was Rs. 38406 in the highest UPMCE group.

**Trip duration:** Trip duration, is referred to as the average number of nights spent on an overnight trip. Most of the respondents (37 per cent) had an average duration of 2 - 3 nights, followed by 6 nights and above (30 per cent).

#### **4. Domestic medical tourism across socio-economic groups**

To find out the pattern of domestic medical tourism, we have used the unit-level data of NSSO Round "*Key Indicators of Domestic Tourism in India: NSS 72nd Round (July 2014-June 2015)*" in this section. It is reported that 40.1 per cent of the tourists opted for health and medical as their purpose of tourism. The major background variables used are Age group, Gender, Education, Usual principal activity status, Place of residence, Caste, Household size, MPCE Group, Relation to head, and Household type (Table 4).

The age-wise classification shows that the highest percentage of tourists were from 40 - 59 years (29.1 per cent) and the least was from 'Below 18 years' of age (14.8 per cent). The highest percentage of health and medical tourists are from the highest age group (64.8

per cent) followed by the 40 - 59 years of age group and the least is reported in the below 18 years of age group (30 per cent). It is evident from the results that we can observe a positive relationship between age and the percentage of health and medical tourists, i.e., the higher the age, the higher the chance of having medical tourists among domestic tourists in India.

The gender-wise analysis shows that there is not much difference between male (50.4 per cent) and female (49.6 per cent) distribution among the tourists. It further shows that females had gone for health and medical tourism more (41.2 per cent) compared to males (39 per cent). Though the total number is lower, the third gender shows the highest percentage among health and medical tourism (61.9 per cent).

Analyzing the data based on education, the highest percentage of tourists were from the 'not literate'<sup>1</sup> group followed by the tourists having 'Literate with formal schooling: Middle' (15 per cent). Among the tourists, it is the literate people without any schooling showed the highest share (52.7 per cent) for medical tourism, and the least is shown among the tourists who were literate with formal schooling having postgraduate and above.

**Table 4**

*Percentage of domestic tourists whose purpose was health and medical*

Background variables	Attributes	Percent- age of Tou- rists	Percent- age of 'health and medical' tourists
Age group	Below 18 years	14.8	30.0
	18 - 29 years	21.8	37.9
	30 - 39 years	17.7	35.4
	40 - 59 years	29.1	43.4
	60 years and above	16.7	64.8
Gender	Male	50.4	39.0
	Female	49.6	41.2
	Third gender	0.0	61.9

Background variables	Attributes		Percentage of Tourists	Percentage of 'health and medical' tourists
Education	Not literate		34.5	52.2
	Literate without any schooling:		0.3	52.7
	Literate without formal schooling:	Through NFEC	0.1	49.2
		Through TLC/AEC	0.1	44.4
		Others	1.2	47.2
	Literate with formal schooling:	Below primary	11.7	38.0
		Primary	13.8	43.2
		Middle	15.0	39.8
		Secondary	10.6	35.6
		Higher	6.2	30.7
		Diploma/certificate course	1.2	25.9
	Graduate	3.9	21.5	
	Postgraduate and above	1.4	21.0	
Usual principal activity status	Worked in h.h. enterprise (self-employed):	own account work	17.9	54.9
		employer	0.7	67.8
	Worked as a helper in h.h. enterprise (unpaid family worker)		6.7	62.5
	Worked as a regular salaried/wage employee		6.0	73.9
	Worked as casual wage labour:	in public works	0.7	52.4
		in other types of work	11.7	53.4
	Did not work but was seeking and/or available for work		0.5	69.9
	Attended educational institution		9.2	78.0
	Attended domestic duties only		19.5	58.7
	Attended domestic duties		11.0	46.8
	Rentiers, pensioners, remittance recipients, etc.		3.7	38.5
Not able to work due to disability		2.5	13.8	
Other (including begging, prostitution, etc.)		3.5	38.9	

Background variables	Attributes		Percentage of Tourists	Percentage of 'health and medical' tourists
Place of residence	Rural		78.7	47.9
	Urban		21.3	25.0
Social group	Scheduled Tribes		7.9	38.4
	Scheduled Castes		19.2	45.4
	Other Backward Classes		46.1	43.8
	Others		26.8	33.0
Household size	3 & below		22.6	40.0
	4 - 5		41.6	38.2
	6 - 7		22.2	42.8
	8 & above		13.6	42.0
MPCE Group	Low MPCE		44.1	48.5
	Medium MPCE		36.3	43.7
	High MPCE		19.7	26.0
Relation to head	Self		35.8	45.5
	Spouse of head		25.9	41.3
	Married child.		6.0	32.8
	Spouse of the married child.		7.6	46.3
	Unmarried child		15.7	30.4
	Grandchild		3.5	30.2
	Father/ mother/ father-in-law/ mother-in-law		3.9	68.0
	Brother/sister/brother-in-law/sister-in-law/other relatives		1.6	36.7
	Servants/employees/other non-relatives		0.0	23.5
Household type	Rural areas:	Self-employed in agriculture	33.6	47.0
		Self-employed in non-agriculture	11.4	47.6
		Regular wage/salary earning	7.9	41.8
		Casual labour in agriculture	12.8	51.4
		Casual labour in non-agriculture	9.8	52.6
		Others	3.3	49.1



Background variables	Attributes		Percentage of Tourists	Percentage of 'health and medical' tourists
	Urban areas:	Self-employed	7.9	25.8
		Regular wage/ salary earning	7.4	19.9
		Casual labour	4.0	42.4
		Others	2.1	25.5
Total			100.0	40.1

Source: Estimated from the unit-level data of NSSO (2016). "Key Indicators of Domestic Tourism in India: NSS 72nd Round (July 2014-June 2015)".

Usual principal activity status shows that the highest percentage of the tourists were the individuals who 'Attended domestic duties only' (19.5 per cent), followed by 'household enterprise (self-employed): own work' (17.9 per cent). Among 'attended educational institutions', 78 per cent of the tourists went for health and medical tourism though their number is comparatively lower, followed by regular salaried/wage employees (74 per cent) and the least share is visible among the tourists who could not work due to disability (13.8 per cent). Place of residence analysis shows that 78.7 per cent of the tourists were from rural areas. A higher share for health and medical purposes can be seen among rural tourists (47.9 per cent) as against urban tourists (25 per cent).

Social group analysis shows that the highest percentage of the tourists were from Other Backward Classes (46.1 per cent), followed by 'Others' (26.8 per cent). The highest share for health and medical purposes was reported among Scheduled Castes (45.4 per cent) and the least was in 'Other' caste groups (33 per cent).

The household size group shows that the highest share of tourists was from the household size group '4 - 5' (41.6 per cent) and the least was from the '8 & Above' group. The highest share of medical and health tourists was from the 6 - 7 members group (42.8 per cent) and the least has been reported among the 4 - 5 household size group (38.2 per cent).

The MPCE group<sup>2</sup> shows that the highest share of tourists was from the 'Low MPCE' group (44.1 per cent) and the least was from the Highest 'MPCE group'. There exists an inverse relationship between MPCE and the percentage share for medical and health tourism, i.e., the higher the monthly per capita consumption expenditure group, the lower the share to go for medical tourism. The highest percentage was reported in the low MPCE group (48.5 per cent) and the least was reported in the highest MPCE group (26 per cent).

The relation to the head category shows that the highest percentage of tourists (35.8 per cent) were 'Self', followed by 'Spouse of the head' (25.9 per cent). The highest share for medical and health tourism was visible among the father/mother/father-in-law/mother-in-law (68 per cent) and the least was reported among unmarried children (30.4 per cent).

Household type analysis shows that the highest share of tourists (33.6 per cent) was 'self-employed in agriculture' from rural areas, while it was 'self-employed' (7.9 per cent) in urban areas. In rural areas, the highest share of medical tourism was reported among casual labourers in non-agriculture, and the least was reported among self-employed in agriculture (47.0 per cent) while in urban areas the highest share for medical tourism was reported among casual labourers (42.4 per cent) and the least was reported among other groups (25.5 per cent).

The foregoing analysis of the percentage of health and medical tourists to the total tourists shows that a higher share of health and medical tourists was visible among the vulnerable group. It is evident from the analysis that the marginalized groups like old age groups, females, rural tourists, SC/ST groups, the lowest MPCE group (MPCE can be considered as the proxy for income status) and casual labourers showed a higher percentage compared to their counterparts.

## 5. Conclusion

Tourism in India has not received due attention both at the macro policy formulation level and also in terms of research there remain some research gaps in tourism in India. The present study attempts to analyze the trend and pattern of domestic tourism based on the unit-level data of NSSO and *India Tourism Statistics*. It has been found

out that India's domestic tourists had been increasing at the rate of 10.4 per cent, and the structural break analysis shows that after 2006 comparatively a lower growth rate is reported. Wide disparity could be seen among the states in India in total number of tourists and its percentage share. The average expenditure for a per night trip has increased to Rs. 13,654 with a 300 percent increase from 2008-09. Socio-economic analysis of the medical tourists showed that a higher share of health and medical tourists was visible among the vulnerable group. The marginalized groups like old age groups, females, rural tourists, SC/ST groups, the lowest MPCE group (MPCE can be considered as the proxy for income status) and casual labourers showed a higher percentage compared to their counterparts. As against the findings of the previous studies, the present study confirms comparatively higher participation of vulnerable groups. The higher participation of vulnerable groups in medical tourism might be an indicator of their low health status when compared to their counterparts. An in-depth analysis is needed in this context to delineate the factors that determine the higher participation by vulnerable groups in medical tourism.

### Endnotes

- 1 The 'Not literate' group also includes infants of less than 5 years of age (6 percent of total tourists).
- 2 For the sake of our analysis the households have been categorized into three based on Monthly Per capita Consumption Expenditure ('Low MPCE' - MPCE below Rs. 1428; 'Moderate MPCE' - MPCE between Rs. 1428.57 and Rs. 2386.67; 'High MPCE' and Rs. 2387.5 & above)

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